

Linking Advanced Technology Industry 4.0 to Environmental Management Accounting (Ema): Impact on Environmental Performance

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ABSTRACT

Sustainability has become vital today as stakeholders demand more information related to the company's environmental and social performance. In order to gather eco-efficient data, companies need to have a good infrastructure or appropriate system for data gathering and sharing in the supply chain. Prior researchers have discussed the use of environmental management accounting (EMA) as one of the tools that can provide environmental information that helps in dealing with environmental issues. Nevertheless, environmental information may not be shared effectively due to poor communication links and the inconsistency of information systems. The motivation to conduct this study is to examine factors that can be solutions to several challenges discovered by prior studies to effectively implementing EMA. Besides that, there are mixed discussions on previous research suggested examining factors that influence the EMA adoption to enhance environmental performance. One of the recent issues is the rise of advanced technology from the Fourth Industrial Revolution (Industry 4.0), which was discussed briefly in recent prior studies. Prior research highlighted advanced technology under Industry Revolution (IR) 4.0 might enhance environmental information. Therefore, the purpose of this study is to investigate the relationship of advanced technology Industry 4.0 on the adoption of EMA leads to the improved environmental performance of the Malaysian electrical and electronic industry.

Keywords: Environmental management accounting (EMA), advanced technology Industry 4.0, industrial revolution 4.0, environmental performance.